

Amendments to the Claims

Please amend Claim 1. Please add new Claim 8. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1. (Currently Amended) An abrasive disc for use with an orbital sander fitted with a dust extraction system having a plurality of exhaust ports on said orbital sander, comprising:
a circular abrasive disc having a major abrading surface provided with an annular zone, intermediate between the center and the circumference of the circular disc wherein the radial distance from the center of the disc to the annular zone is from one third to one half of the radius of the disc and the radial distance from the circumference of the disc to the zone is from one quarter to one third the radius of the disc, and, exclusively within the annular zone, a plurality of perforations, each having a diameter less than one quarter the width of the annular zone and being essentially uniformly spaced in the zone such that the distance between any pair of adjacent perforations is less than twice the greatest dimension of either perforation and at least two perforations are in register with each exhaust port on an orbital sander.
2. (Original) An abrasive disc according to Claim 1 wherein the annular zone has a radial width that is from a quarter to a third of the radius of the disc.
3. (Original) An abrasive disc according to Claim 2 wherein the perforations have a greatest dimension that is less than one quarter of the radial width of the annular zone.
4. (Original) An abrasive disc according to Claim 1 wherein there are from 4 to 40 perforations per square inch within the annular zone.

5. (Original) An abrasive disc according to Claim 1 wherein the disc has an abrasive-bearing side and a reverse side and the reserve side is provided with means to attach the disc to a backup pad.

6. (Original) An abrasive disc according to Claim 5 in which the means for attaching the disc to a backup pad is selected from a hook and loop attachment pair and a pressure-sensitive adhesive.

7. (Original) An abrasive disc according to Claim 5 in which a porous layer permeable to swarf generated during use is attached directly to the reverse side of the abrasive disc.

8. (New) An orbital sander system comprising:

an orbital sander fitted with a dust extraction system having about five to eight exhaust ports on a backing pad; and

a circular abrasive disc having a major abrading surface provided with an annular zone having a sufficient plurality of perforations so that wherein at least two perforations are in register with each exhaust port on said backing pad of said orbital sander.